

FIG. 1

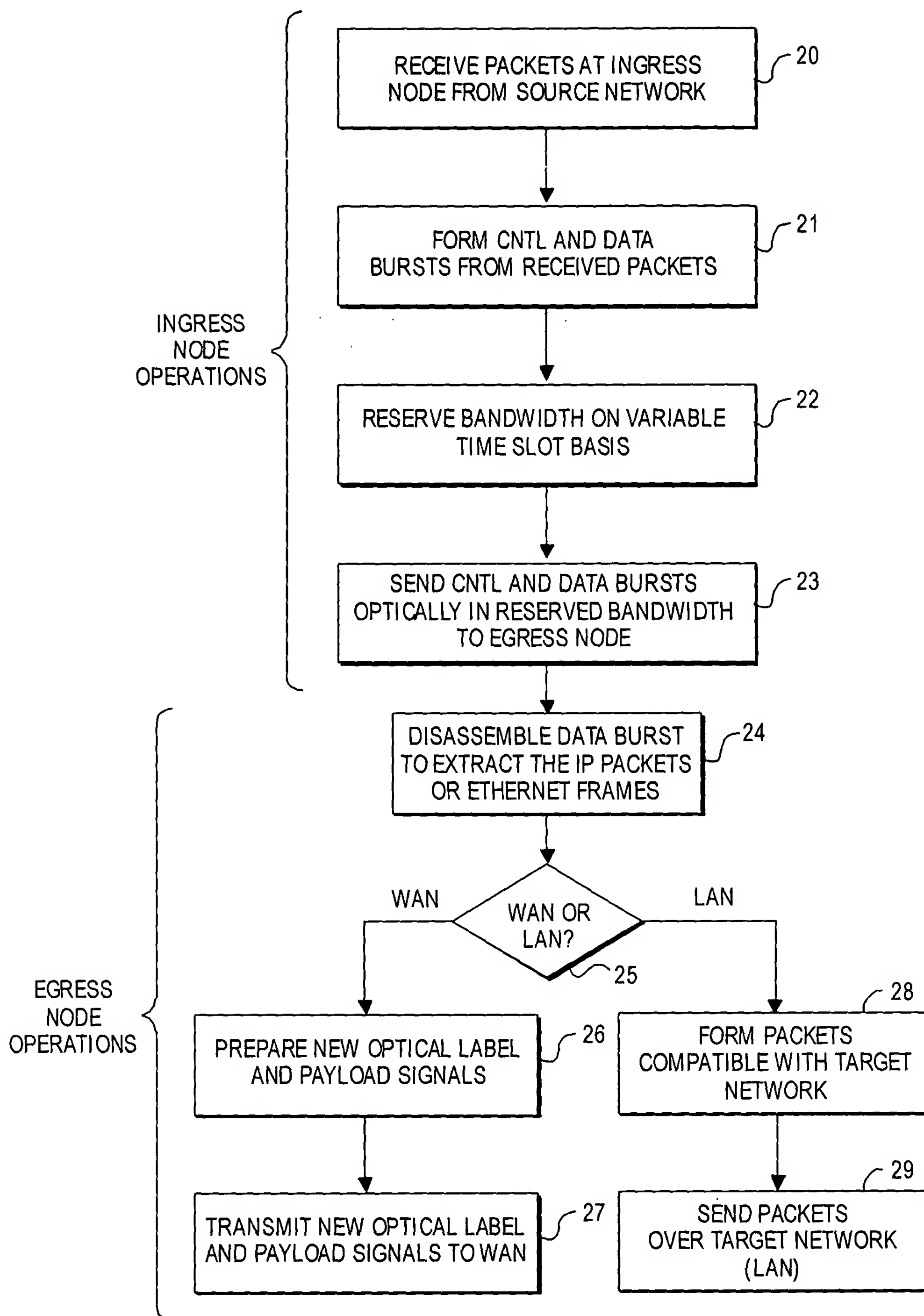


FIG. 2

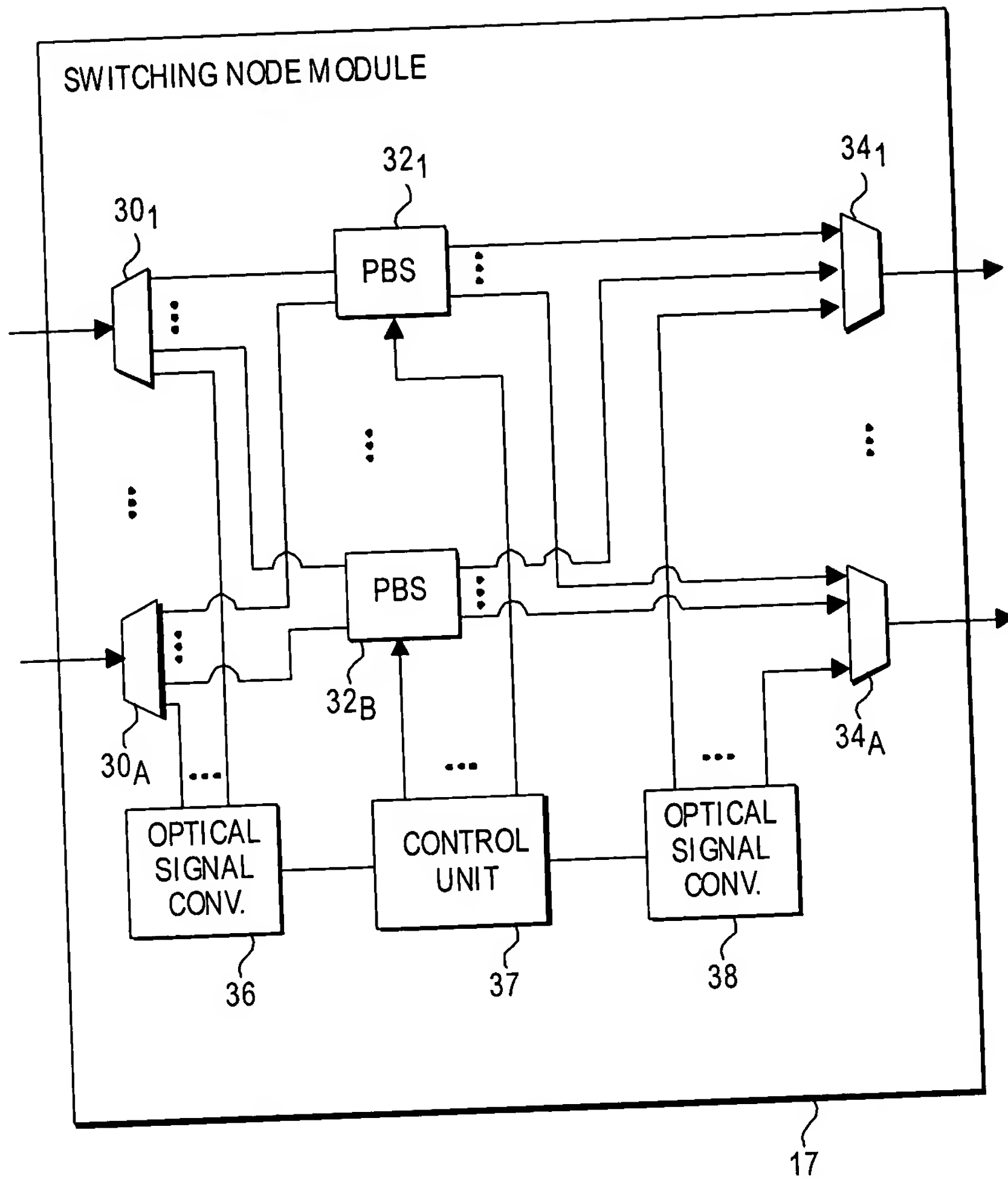


FIG. 3

GMPLS BASED ARCHITECTURE FOR PBS

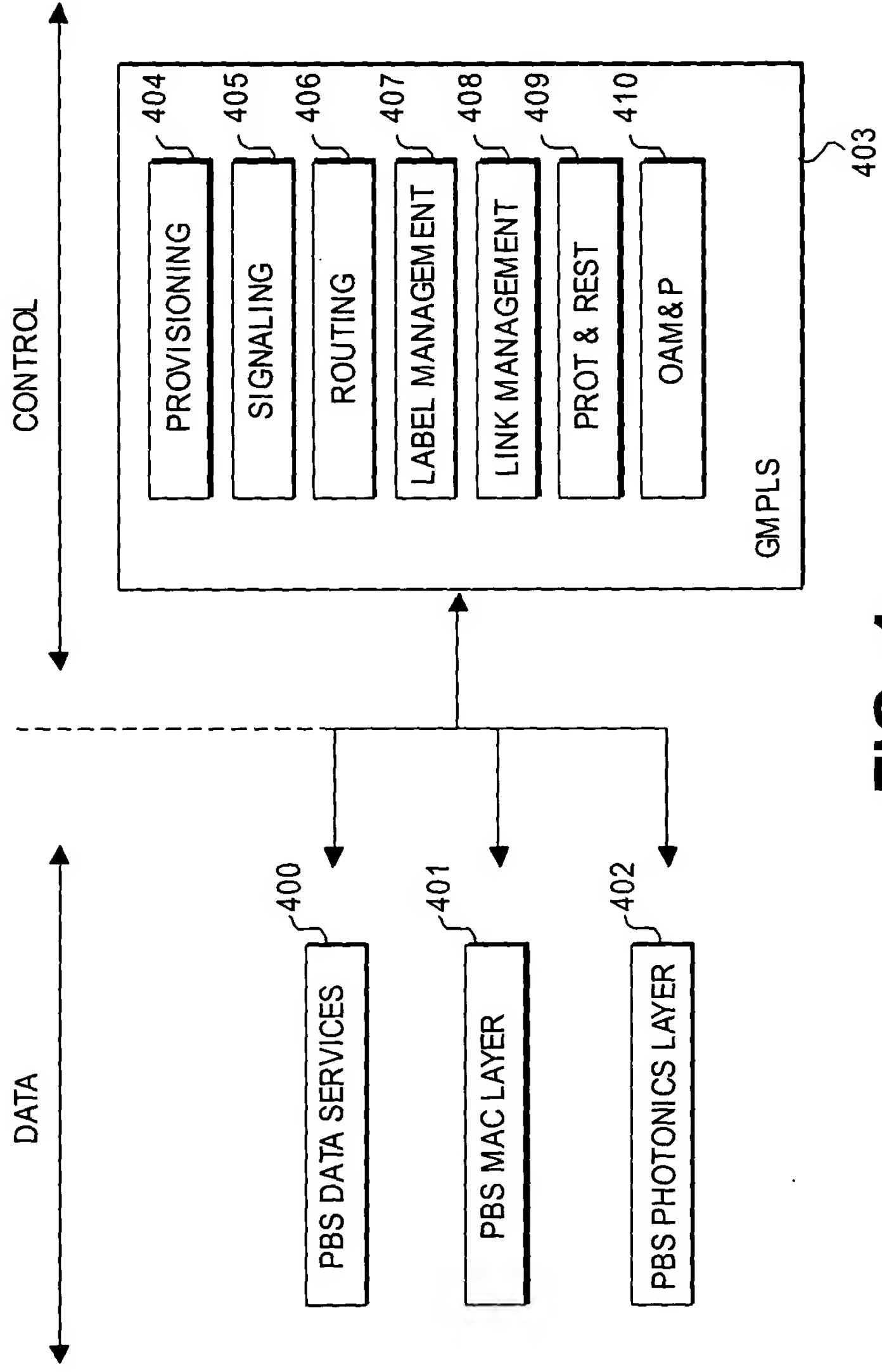


FIG. 4

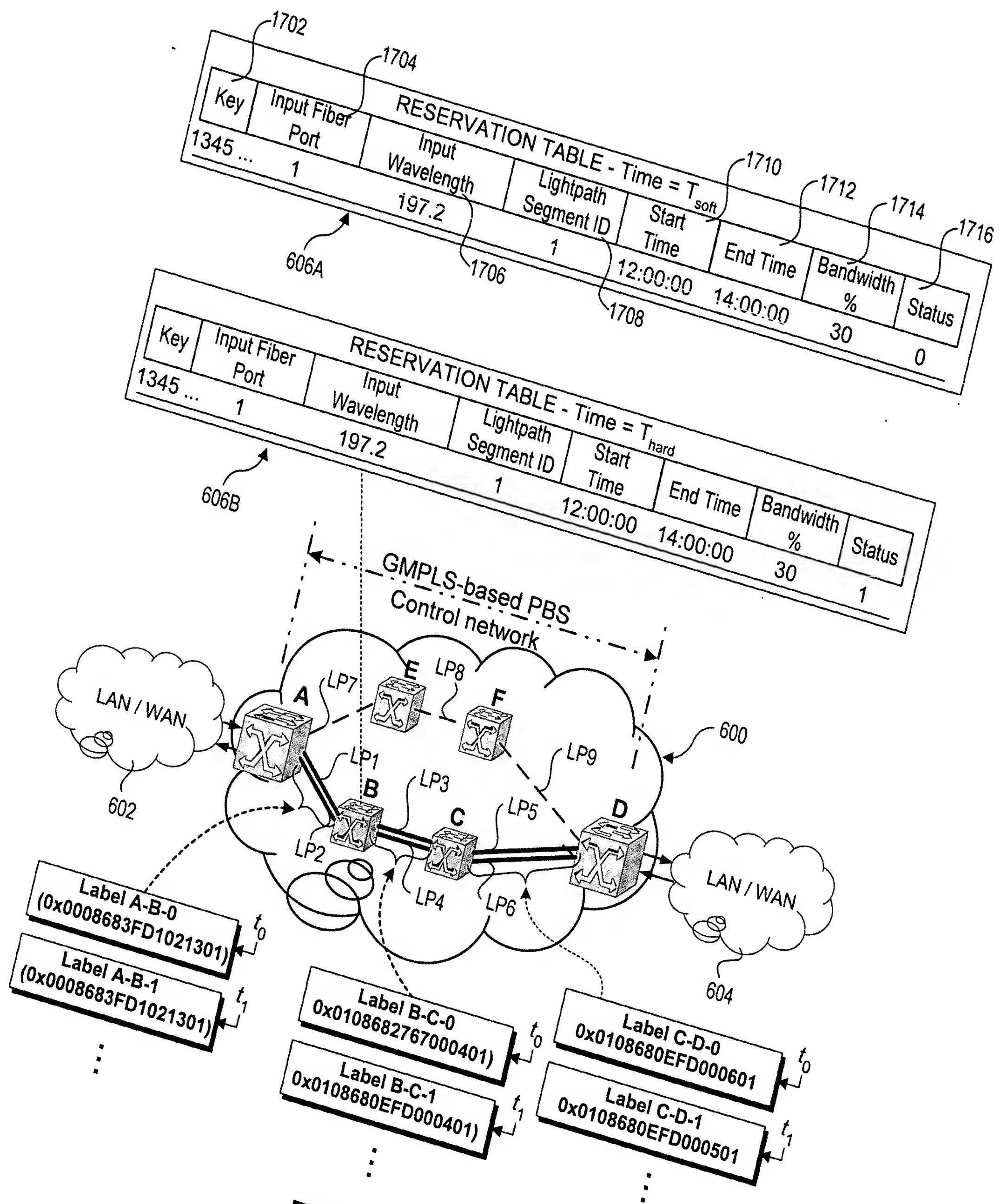
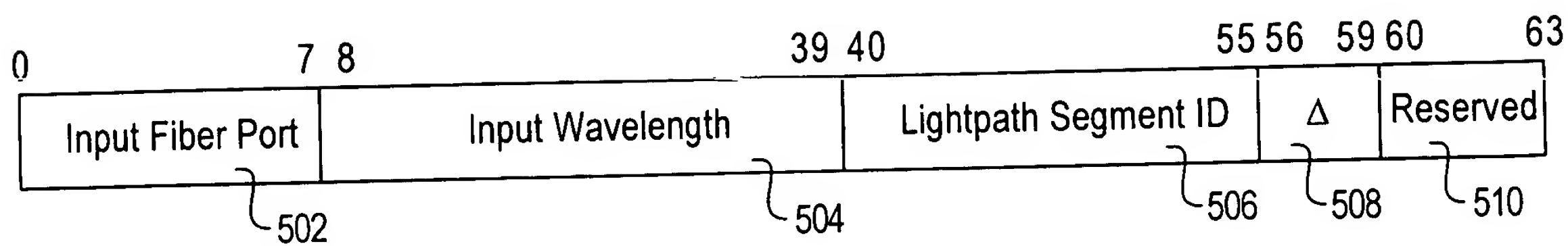


FIG. 6



500

FIG. 5

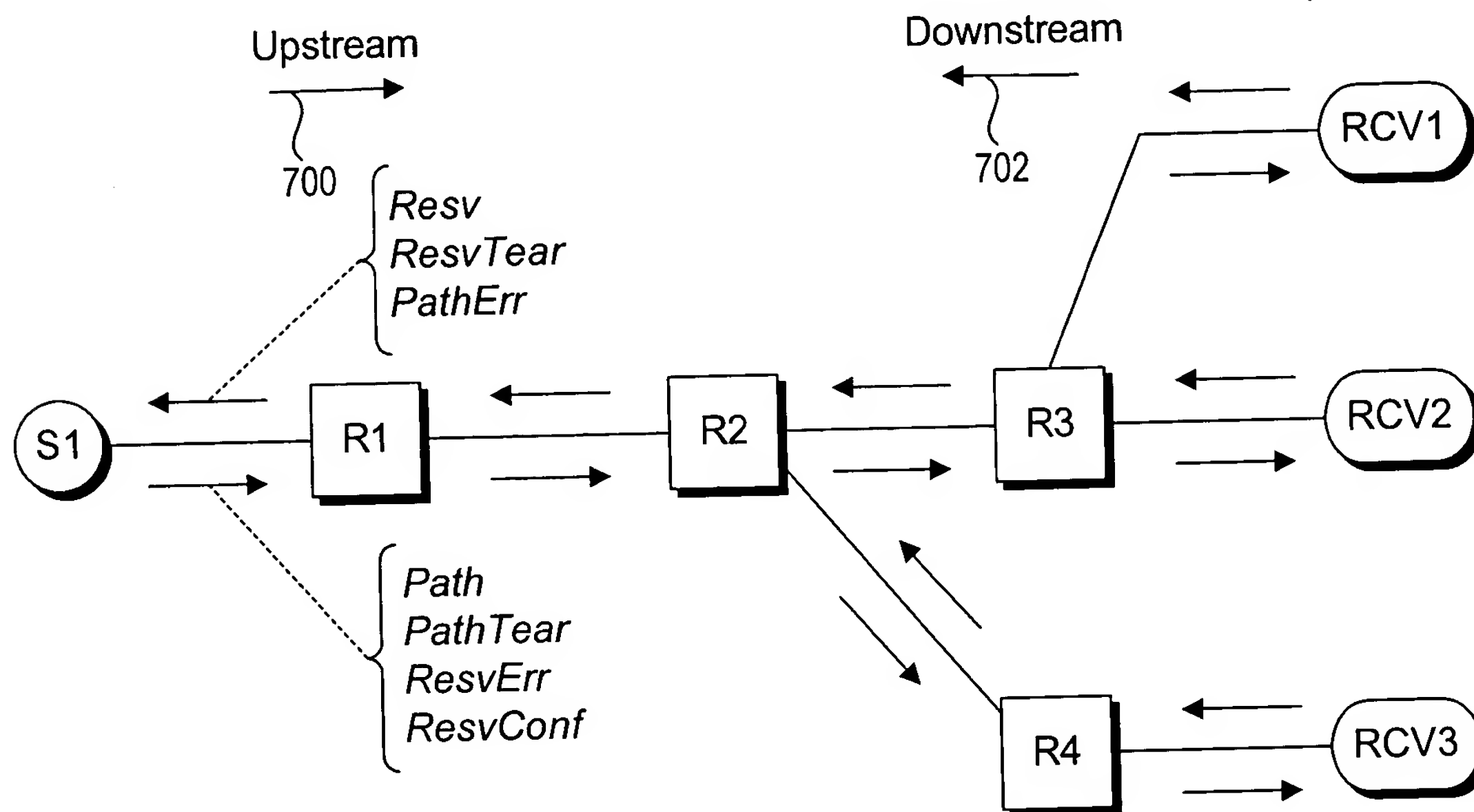


FIG. 7

<Path Message> ::=
 <Common Header> ~ 802
 [<INTEGRITY>] ~ 804
 <UNI_IPv4_SESSION> ~ 806
 <IPv4_IF_ID_RSVP_HOP> ~ 808
 <TIME_VALUES> ~ 810
 [<EXPLICIT_ROUTE>] ~ 811
 <GENERALIZED_PBS_LABEL_REQUEST> ~ 812
 [<LABEL_SET> ...] ~ 814
 [<ADMIN_STATUS>] ~ 816
 <DESTINATION_PBS_ADDRESS> ~ 818
 <SOURCE_PBS_ADDRESS> ~ 820
 [<POLICY_DATA> ...] ~ 822
 <sender descriptor> ~ 824

or

FIG. 8a

800

Sender descriptor for a unidirectional PBS light-path:

▶ <sender descriptor> ::=
 <LSP_TUNNEL_IPv4_SENDER_TEMPLATE> ~ 826
 <PBS_SENDER_TSPEC> ~ 828

FIG. 8b

824A

Format of the sender descriptor for a bi-directional PBS light-path

▶ <sender descriptor> ::=
 <LSP_TUNNEL_IPv4_SENDER_TEMPLATE> ~ 826
 <PBS_SENDER_TSPEC> ~ 828
 <UPSTREAM_LABEL> ~ 830

FIG. 8c

824B

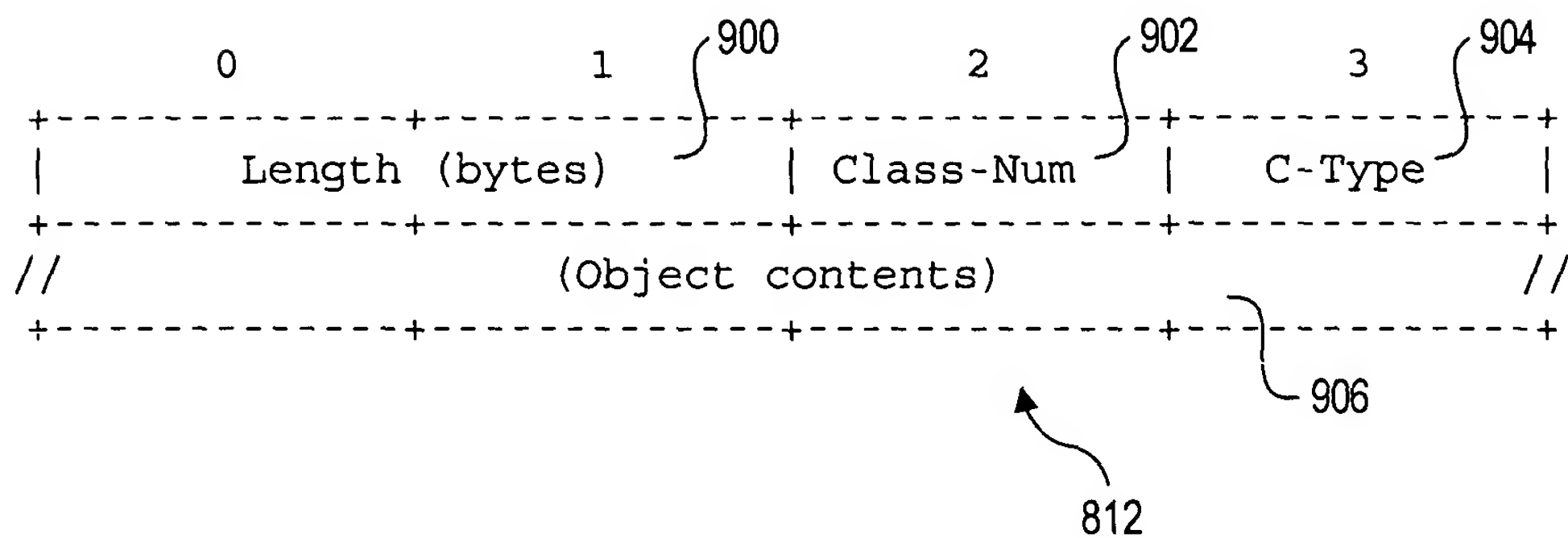


FIG. 9

```

<Resv Message> ::=
  <Common Header> ~ 802
  [ <INTEGRITY> ] ~ 804
  <UNI_IPv4_SESSION> ~ 806
  <IPv4_IF_ID_RSVP_HOP> ~ 808
  <TIME_VALUES> ~ 810
  [ <IPv4_RESV_CONFIRM> ] ~ 1004
  [ <ADMIN_STATUS> ] ~ 816
  [ <POLICY_DATA> ... ] ~ 822
  <STYLE> ~ 1006
  <FF flow descriptor> ~ 1008

```

FIG. 10a

```

<FF flow descriptor> ::=
  <PBS_FLOWSPEC> ~ 1010
  <LSP_TUNNEL_IPv4_FILTER_SPEC> ~ 1012
  <GENERALIZED_PBS_LABEL> ~ 1014

```

FIG. 10b


```

<PathTear Message> ::=
    <Common Header> ~ 802
    [ <INTEGRITY> ] ~ 804
    <UNI_IPv4_SESSION> ~ 806
    <IPv4_IF_ID_RSVP_HOP> ~ 808
    [ <ADMIN_STATUS> ] ~ 816
    <sender descriptor> ~ 824

```

FIG. 11

1100

```

<ResvTear Message> ::=
    <Common Header> ~ 802
    [ <INTEGRITY> ] ~ 804
    <UNI_IPv4_SESSION> ~ 806
    <IPv4_IF_ID_RSVP_HOP> ~ 808
    [ <ADMIN_STATUS> ] ~ 816
    <STYLE> ~ 1006
    <FF flow descriptor> ~ 1008

```

FIG. 12

1200

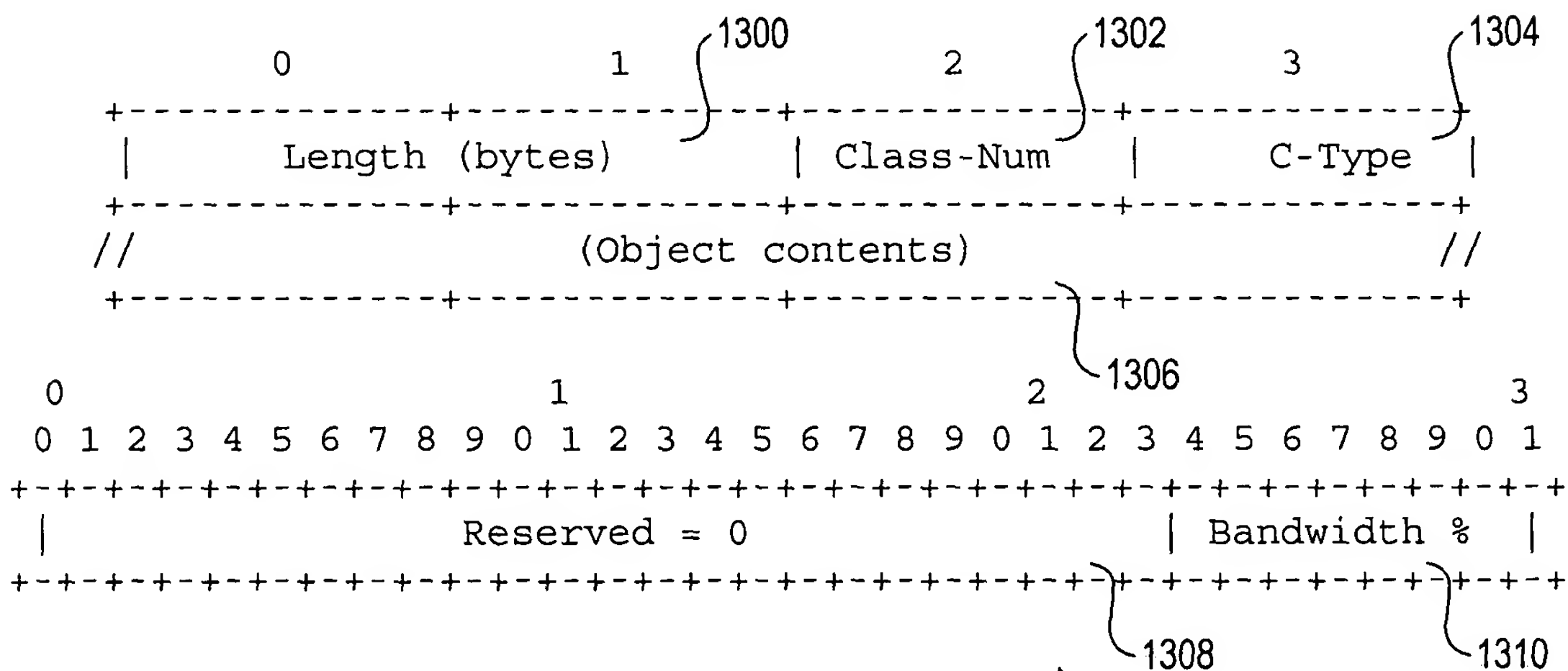
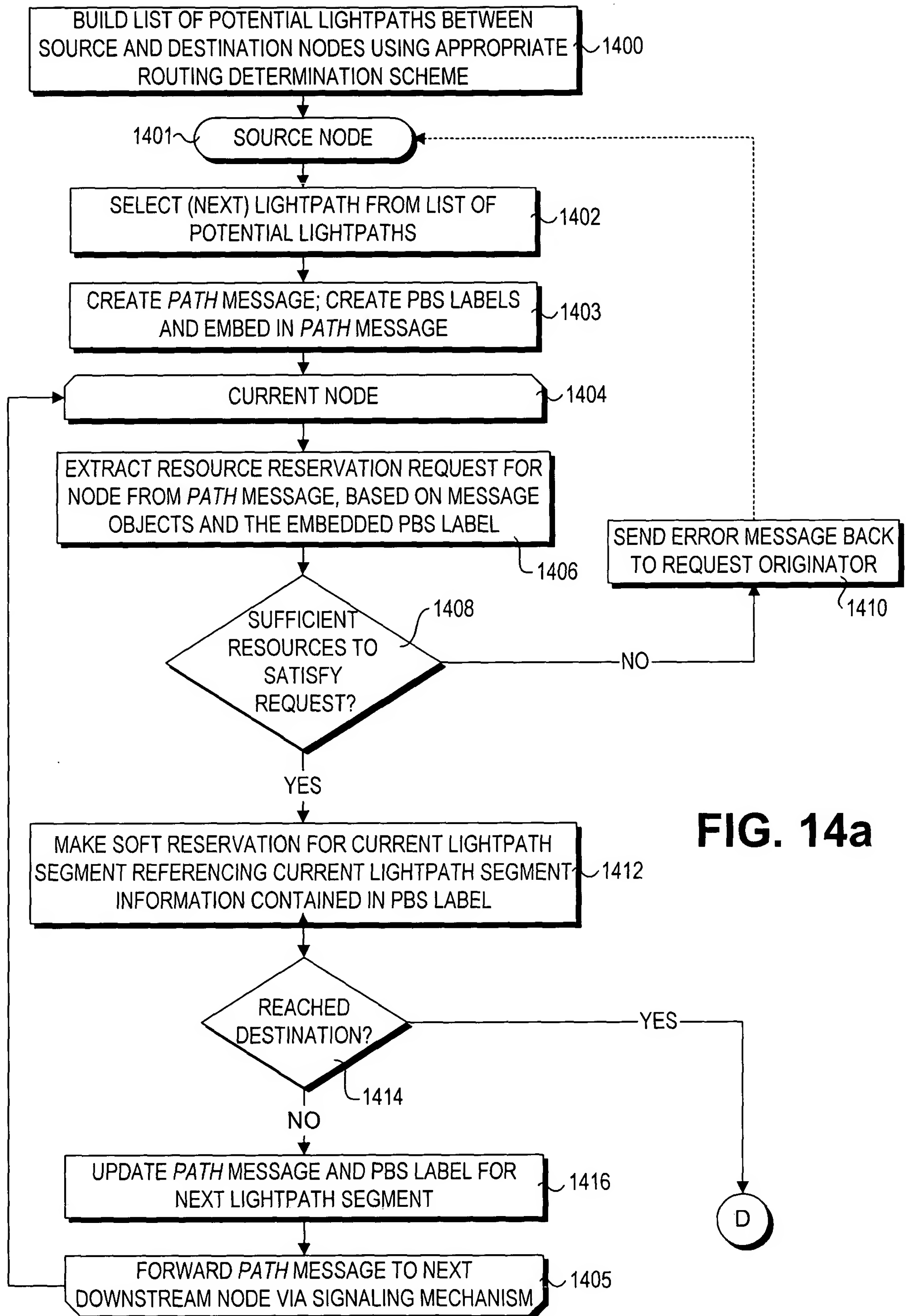


FIG. 13

828, 1008



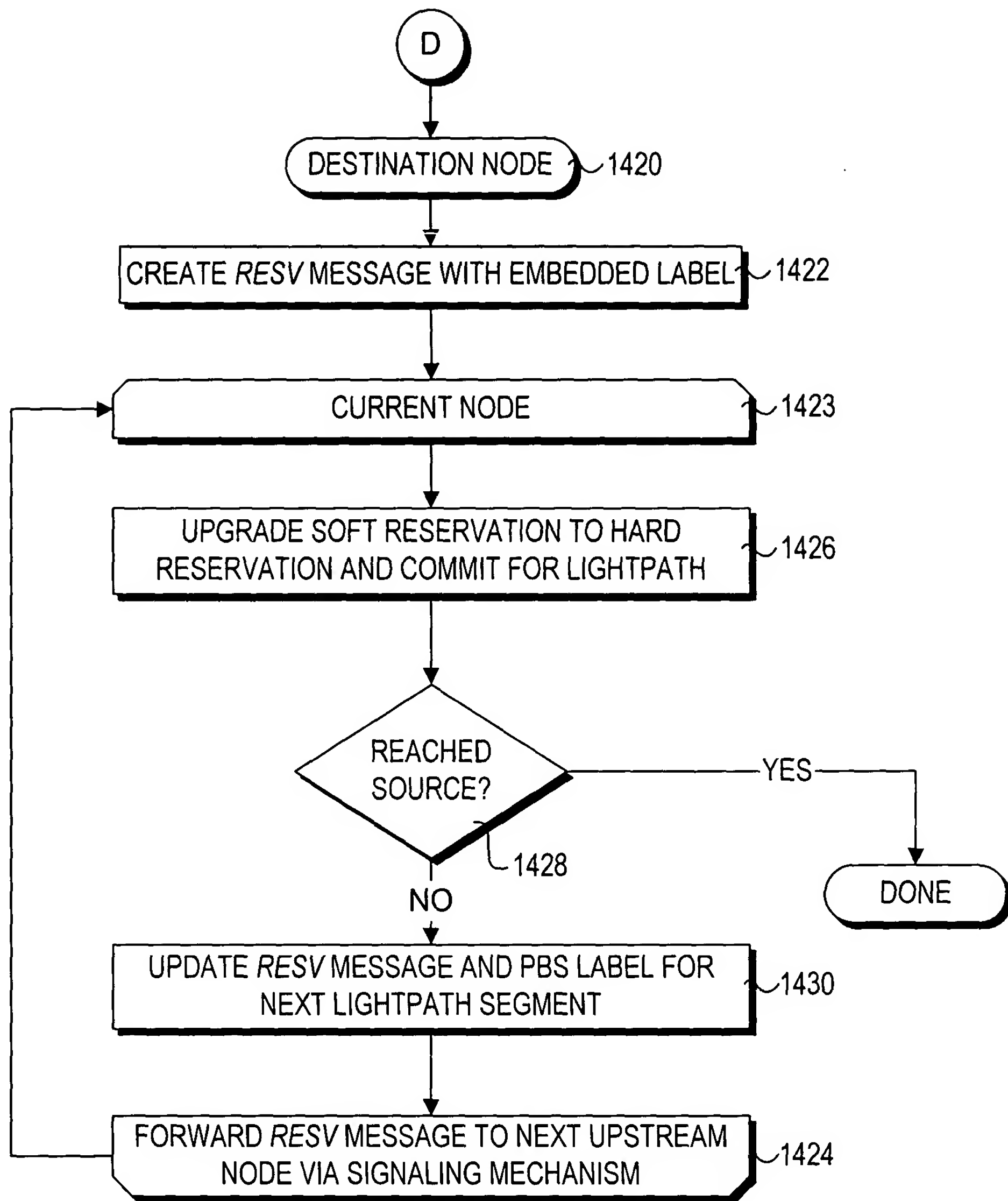


FIG. 14b

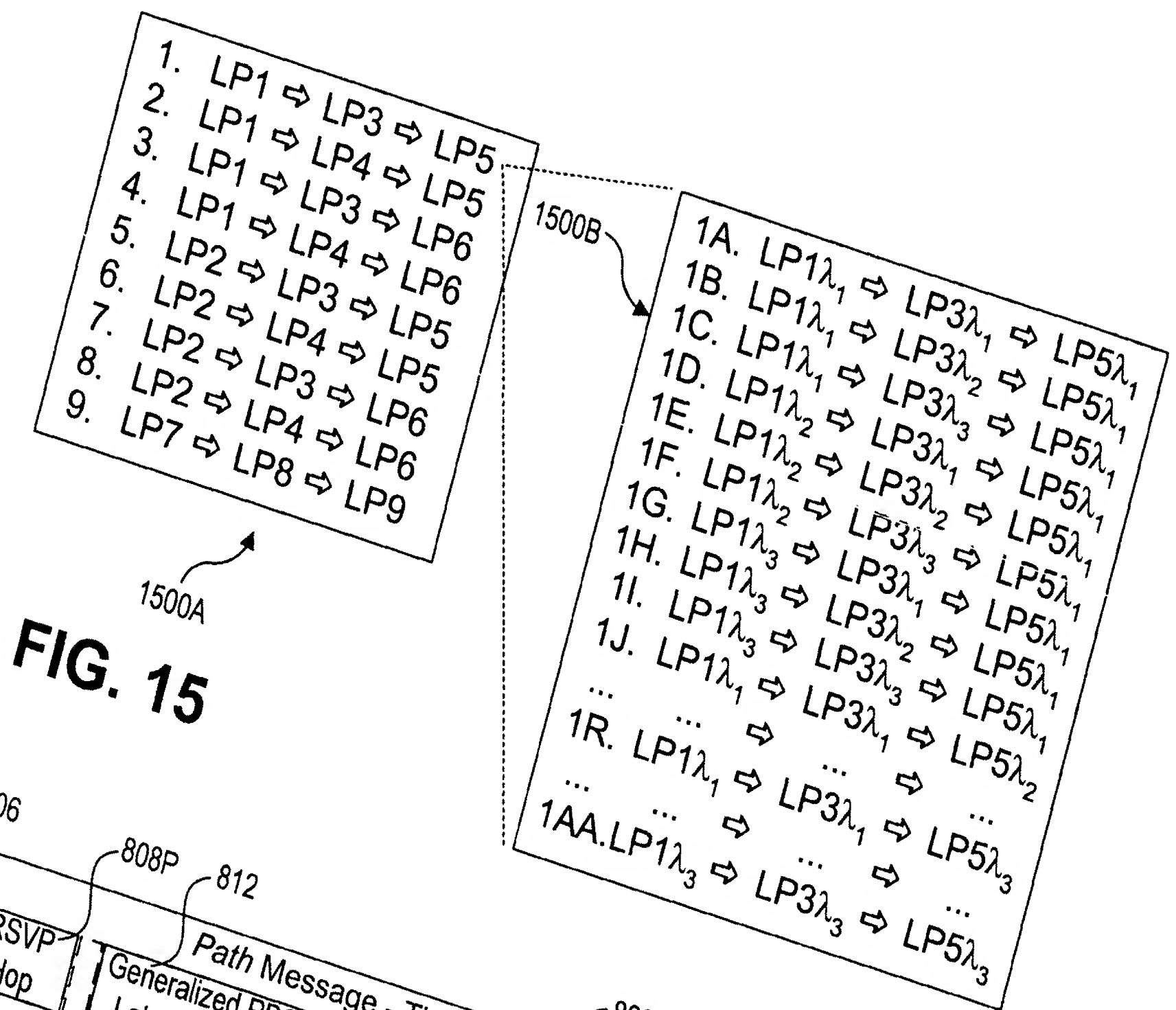


FIG. 15

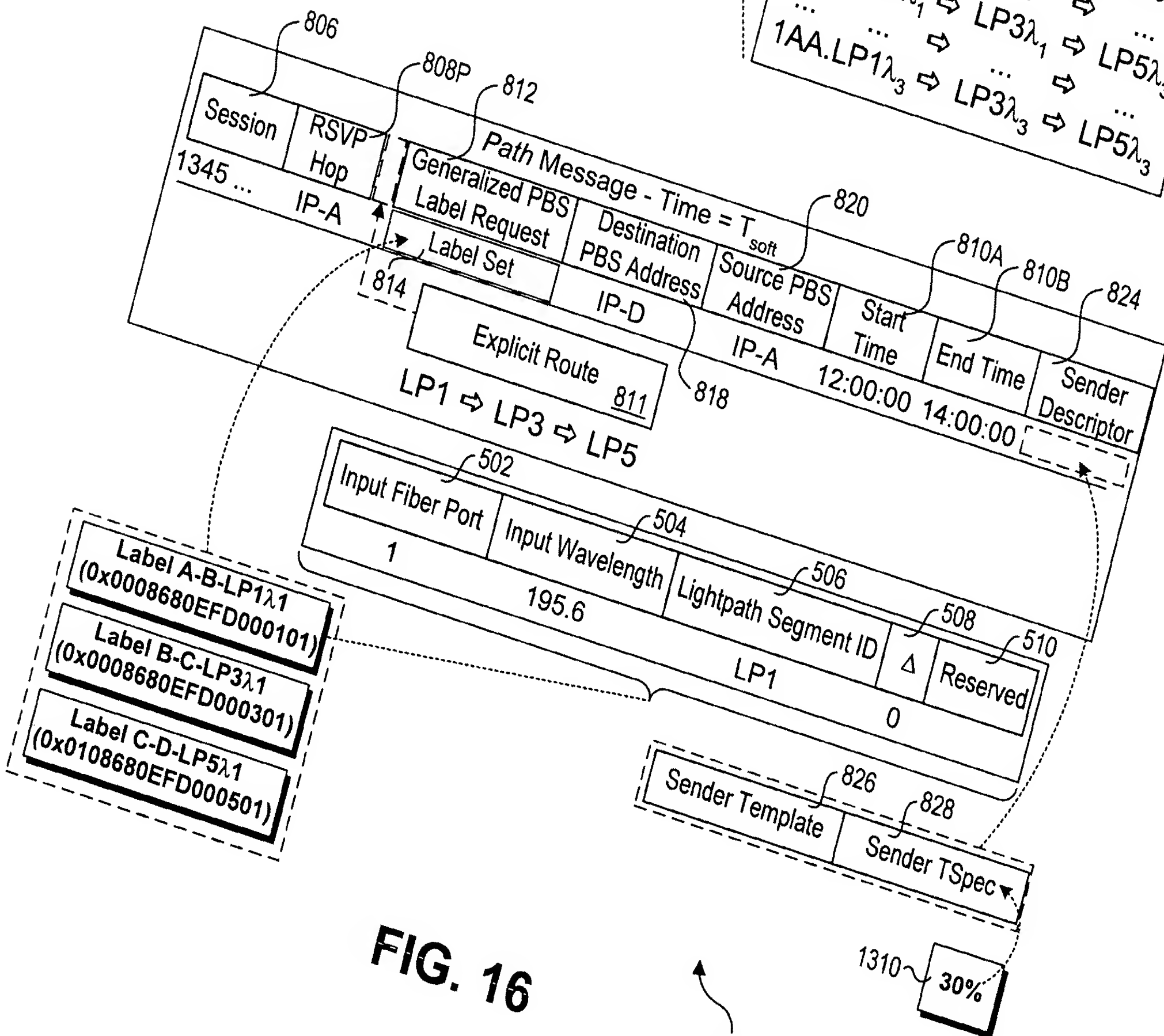


FIG. 16

Key (Session)	Input Fiber Port	Input Wavelength	Lightpath Segment ID	Start Time	End Time	Bandwidth %	Status
... 1005	1	196.4	1	12:00:00	15:00:00	20	1
... 1027	1	197.2	1	11:00:00	12:00:00	30	1
... 1045	2	197.2	2	12:00:00	13:00:00	35	1
... 1115	1	196.4	1	12:00:00	14:00:00	15	1
... 1146	1	195.6	1	12:45:00	14:30:00	40	1
... 1178	2	196.4	2	12:00:00	14:00:00	10	1
... 1222	1	197.2	1	13:00:00	14:00:00	25	1
... 1256	1	195.6	1	12:30:00	13:45:00	25	1
... 1313	2	196.4	2	11:30:00	12:15:00	20	0
... 1345	1	195.6	1	12:00:00	14:00:00	30	0

1700

FIG. 17a

... 1146	1	195.6	1	12:45:00	14:30:00	40	1
... 1256	1	195.6	1	12:30:00	13:45:00	25	1
... 1345	1	195.6	1	12:00:00	14:00:00	30	0

FIG. 17b

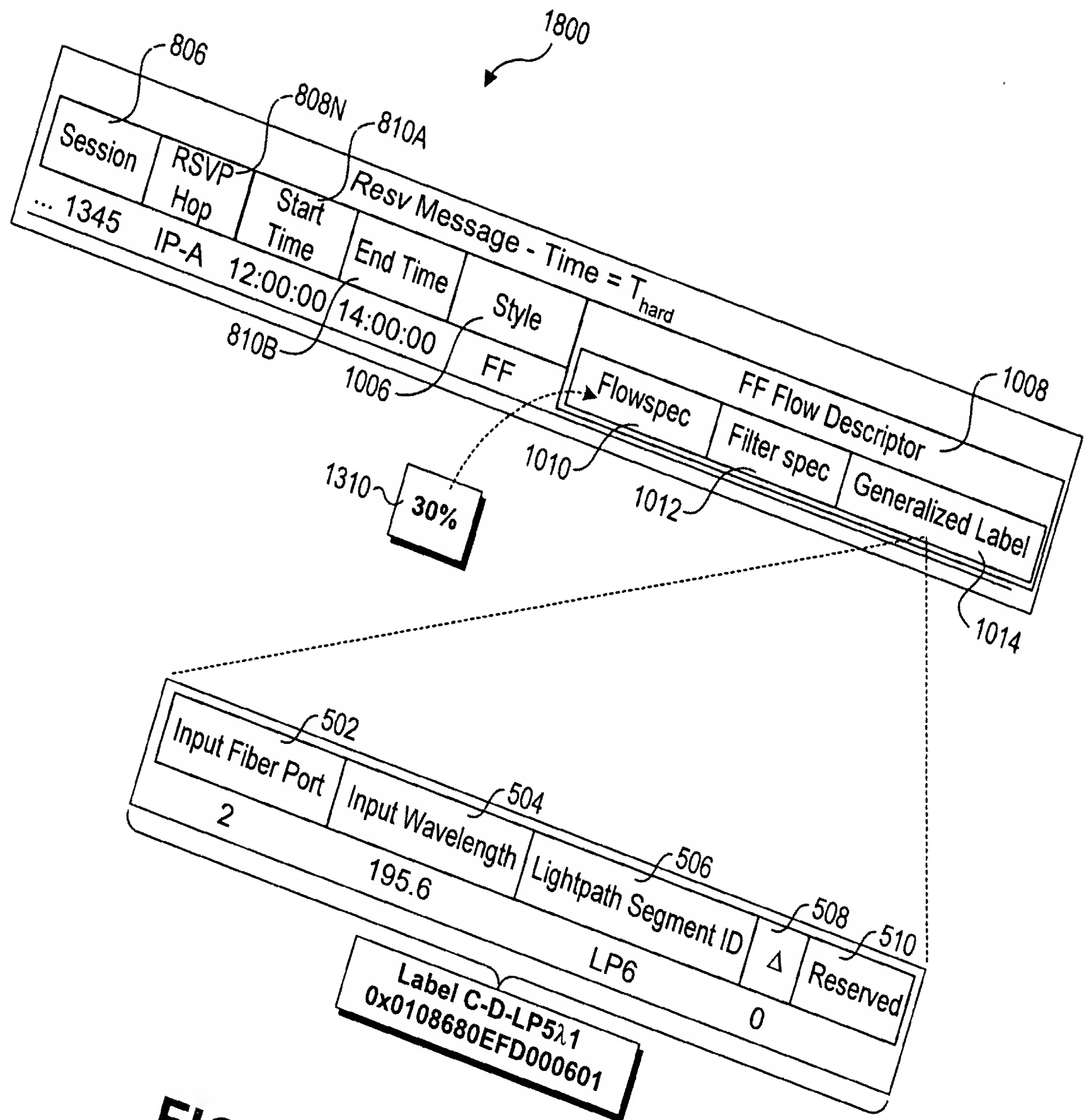


FIG. 18

